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| EXAMINER |
|---|
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| ART UNIT | PAPER NUMBER |
|---|---|
| 2623 | |

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/898,675 | RAKIB, SELIM SHLOMO |
| | Examiner | Art Unit | |
| | Annan Q. Shang | 2623 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on <u>22 August 2006</u>.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)  Office Action Summary  Part of Paper No./Mail Date 20061109

## DETAILED ACTION

### Continued Examination Under 37 CFR 1.114

1.      A request for continued examination under 37 CFR 1.114, including the

fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection.  Since

this application is eligible for continued examination under 37 CFR 1.114, and the fee

set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office

action has been withdrawn pursuant to 37 CFR 1.114.  Applicant's submission filed on

08/22/06 has been entered.

### Claim Rejections - 35 USC § 102

2.      The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this Office

action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.      Claims 15 and 17-20 are rejected under 35 U.S.C. 102(e) as being

anticipated by **Ellis et al (2005/0028208).**

As to claim 15, note the **Ellis** reference figures 1-7, discloses client server based

interactive television program guide system with remote access and further discloses a

method of data transport comprising:

Receiving (UTVE/STB 22/28) a command data from a remote control (RAD-24)

via a radio frequency receiver circuitry; instructing a satellite receiver circuitry

(UTVE/STB 22/28) to receive a first set of compressed data on a first channel from a

satellite dish according to the command data; storing the first set of compressed data in

a hard disk if the first set of compressed data is to be processed later (page 6, [0101-

0102], [0115-0122], [0127-0139], [0162-0168] and 0186]+);

Instructing the satellite receiving circuitry to receive a second set of compressed

data on the second channel from the satellite dish according to the command data while

the first set of compressed data is still being received from the first channel and stored

to the hard disk; decompressing the second set of compressed data into a second set of

data if the second set of compressed data is to be compressed for displaying according

to the command data and displaying the second set of data while the first compressed

data is still being received from the first channel and stored to the hard disk in response

to the command (page 6, [0101-0102], [0115-0122], [0127-0139], [0162-0168] and

0186]+), note that the RAD-24 issue various recording commands to UTVE/STB 22/28,

which detects the current channel setting and adjusts current channel setting to the

channels in accordance with the command. Furthermore RAD-24 can view other

programs in real-time and perform various functions, while information is being stored

on the hard disk of the UTVE/STB 22/28.

Claim 17 is met as previously discussed with respect to claim 15.

Claim 18 is met as previously discussed with respect to claim 15

Claim 19 is met as previously discussed with respect to claim 15

Claim 20 is met as previously discussed with respect to claim 15

### Claim Rejections - 35 USC § 103

4.     The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

5.     Claims 1-4 and 16 are rejected under 35 U.S.C. .103(a) as being

unpatentable over **Ellis et al (2005/0028208)** in view of **Yamamoto (6,169,845).**

As to claim 1, note the **Ellis** reference figures 1-7, discloses client server based

interactive television program guide system with remote access and further discloses a

gateway (User Television Equipment 'UserTVE' 22, Set top box 'STB' 28 or Interactive

Program Guide Television Equipment 'IPGTVE' 17, figs.1-6) that implements TIVO-like

functions comprising:

a switching circuit having a plurality of input and output (I/O) ports and capable of

routing multiple sets of data at substantially same time (Tuner/Communication Circuitry

'Tuner/CC' of STB-28 or Satellite Receiver, figs.2d-4 and page 4, [0070-0077] and

[0082-0086]);

a digital TV satellite receiver capable of receiving data from a satellite dish and

coupled to I/O port of the switching circuit (page 4, [0066-0068] and [0094]);

an infrared or radio frequency receiver circuitry (infrared receiver of STB-28) for

receiving commands and data from a remote (Remote Access Device or Remote

Control 'RAD' 24 ) and coupled to I/O port of the switching circuit, where the commands

and data from the remote control provide instructions to the digital TV Satellite receiver

and a computer (figs.5-7, page 4, [0070-0077], [0092-0097]);

a modem or transceiver (Communication Device 'CD' 37/51) coupled to I/O port

of the switching circuit and capable of accessing data from the Internet (page 7, [0095-

0101]);

cable modem or transceiver means (CD 37/51) coupled to I/O port of the

switching circuit;

a network interface circuit or bus (CD 37/51) couple to the switching circuit as

well as to a port for connection to a local area network or external bus (page 6, [0081-

0088]), note that STB-28 CD-37/51 is a network interface device to LAN devices, such

as: RAD-24, Secondary Storage device 47, digital storage device 49, DVD, digital VCR,

PC, etc.;

a rating shaping circuitry or bus driver (Control Circuitry/Processing Circuitry

'CC/ProC' 42 of STB-28) which is coupled to I/O port of the switching circuit for altering

the bandwidth of the data routed through the rate shaping circuitry (page 6, [0082-

0090], [0093-0096]), note that STB-28 receives low and high frequency signals, from

satellite, Internet link, serial or parallel link, network link, and other wired or wireless

digital or analog link and alters the bandwidth of data routed through the devices on the

LAN and STB-28 CC/ProC-42 exchanges data at high data rate between STB-28 and

MF-12 or DF-16 to meet user interactive requests, on-demand;

a decompression and conversion circuit or one or more processing means (ProC

or Display Circuitry 'DC' of STB 28) having a digital data input (see figs.3-5) coupled to

I/O port of the switching circuit (Tuner/CC) and having video and audio analog signal

output ports and functioning to decompress digital video and audio data supplied by the

switching circuit (Tuner/CC) and convert the decompressed digital video and audio data

into analog video signals and audio signals at the video and audio analog output ports

and to receive uncompressed data from the modem or the receiver and convert it to

video and/or audio analog signals at the video and audio analog output ports

respectively ((page 6, [0082-0090], [0093-0096]), [0102-0112], [0115-0119], [0120-

0122], [0127-0139], [0162-0168] and 0186]+), note that ProC of UTVE-22 or STB-28

receives digital compressed MPEG-2 data stream transmitted from Main facility (MF) 12

or Distribution Facility (DF) 16 and UserTVE or STB-28, demultiplexes, decodes,

encodes, conditional access, decryption, decompresses and converts (CC/ProC within

STB-28) the received data to analog NTSC for display of NTSC-TV 36/54, furthermore

UserTVE-22 or STB-28 receives IP data (which includes guide data, program data,

etc.,) via communication path 19/20;

. a hard disk (Hard Disk 'HD' 31, 32, 49, 63, etc.,) coupled to the switching circuit

(Tuner/CC) and capable of storing compressed digital video and audio data from the

digital TV satellite receiver via the switching in response to a command and data from

the remote control, RAD-24 (page 6, [0081-0091], [0127-0128] and [0163-0164]);

a computer (CC-42 or ProC of STB-28) coupled to I/O ports of the switching

circuit (Tuner/CC) and configured to control switching circuit (note that Tuner/CC upon

user's request records/playback programs to/from the recording mediums), the digital

TV satellite receiver, the infrared or radio frequency receiver circuit, the modem or the

decompression and conversion circuit in response to the commands and data from the

remote control (page 6, [0081-0091], [0115-0119], [0127-0139], [0162-0168] and

0186]+), note that the CC-42 or ProC is configured to download program guide data

([0201]) via the modem and to perform on of timed recording, simultaneously recording

and automatic recording functions in response to commands from the wireless RAD

and/or to control the switching circuit to supply IP or MPEG format packet data from the

cable modem to the network interface circuit or bus driver for output to one or more

peripherals or to the decompression and conversion circuit for conversion to analog

video and/or analog signals at the video and audio output port for display on a

conventional television, and programmed to control the switch to route selected data

through the shaping circuitry and to control the rating shaping circuitry to alter the

bandwidth of data routed through.

Ellis fails to explicitly teach a crossbar switching or router circuit having a plurality

of input and output (I/O) ports.

However, note the **Yamamoto** reference figures 4-7, discloses moving-image

data recording/reproducing apparatus for simultaneously recording/reproducing a

plurality of moving image by using a plurality of moving-image I/O passages coupled to

a crossbar switch (col.3, line 47-col.4, line 35 and line 36+).

Therefore it would have been obvious to one of ordinary skill in the art at the time

of the invention to incorporate the teaching of Yamamoto into the system of Ellis in

order to speed up the flow of information.

As to claim 2, Ellis further discloses where the gateway includes an MP3 server,

for recording music, coupled to CC/ProC-42 of STB-28 and controlled by the computer

to supply MP3 data to the network interface circuit or bus transceiver for output to LAN

Devices coupled to the gateway via a LAN or external bus (page 3, [0060] and page 5,

[0075]).

As to claim 3, the claimed "a gateway that implements TIVO-like functions..." is

composed of the same structural element that were discussed in the rejection of claim 1

above.

As to claim 4, the claimed "a gateway that implements TIVO-like functions..." is

composed of the same structural element that were discussed in the rejection of claim 1

above.

As to claim 16, Ellis teaches all the claimed limitations as previously discussed

with respect to claim 15, but fail to explicitly teach distributing the plurality of instructions

via a crossbar switching circuit.

However this deficiency is disclosed in Yamamoto reference as discussed above.


6.      Claims 7-9, 12 and 14 are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Ellis et al (2005/0028208)** in view of **Isono et al (6,216,171)**.

As to claims 7-8, Ellis as modified by Yamamoto, teach all the claimed limitations as previously discussed with respect to claim 1 above, including processes IP packets, but fails to explicitly teach encapsulating the video and Internet Data from headend and a DHCP server means coupled to the router for assigning IP addresses to client processes in the peripherals and the gateway and receiving data packets addressed to the headend and routing the packets to the headend via using the processing means and the transceiver means

However, note **Isono** reference discloses a Cable Modem Gateway 9 for receiving data and routing data accordingly to LAN devices, includes DHCP Server for assigning IP addresses to devices on the LAN and further encapsulating video and Internet data from the headend and permits devices on the LAN to communicate directly to the headend (figs. 1, 2 and col. 3, lines 9-56).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Isono into the system of Ellis to include a DHCP Server in a receiver to assign IP addresses and permit the headend or the service provider to communicate directly with devices on the LAN and route data to the LAN devices accordingly and further enable to LAN devices to communicate with each other.

As to claim 9, Ellis further disclose receiving an e-mail at the STB-28 and displaying at TV-36 where the user can interact to transmit messages via the STB-28 to the service provider (page 6, [0095-0101], [0106-119], [0180] and [0228]).

As to claim 12, Ellis further discloses where the computer is further programmed with HTTP web server for controlling the computer to serve web pages to browsers browsing the Internet via the packet switch/router and an interface means for interfacing to the Internet to provide an always-on connection to the Internet ((page 6, [0095-0101], [0106-119], [0180] and [0228]).

As to claim 14, Ellis further discloses a display (TV-36/45) coupled to a display adapter (display circuitry) which is coupled to the packet switch/router (Tuner/CC) and further comprising a input device coupled to an interface circuit which is coupled to the packet switch/router the input device and display for controlling the gateway by issuing commands to the computer and displaying user interface data and/or command and/or program icons on display, and where the packet switch/router (page 6, , [0081-0091], [0095-0101], [0106-119], [0127-0128] and [0163-0164 and [0180]).

Ellis fails to explicitly teach where the LAN interface cards cooperate to allow any peripheral coupled to the LAN to any local area network interface card to communicate with any other peripheral coupled by a LAN to different LAN interface through the packet switch/router, however Isono teaches the claimed limitations as discussed with respect claim 7.


7.     Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ellis et al (2005/0028208)** in view of **Yamamoto (6,169,845),** and further in view of **Billerbeck et al (6,844,895)**

As to claim 5, Ellis as modified by Yamamoto, teach all the claimed limitations as previously discussed with respect to claim 1 above, but fail to explicitly teach altering the bandwidth of data routed through to match the available bandwidth of whatever data on which the data is to be transmitted.

However, note the **Billerbeck** reference figure 3, discloses wireless intelligent host imaging, audio and data receiver, where Data Receiver Unit 'DR' 40 (a gateway), receives a broadcast signals, converts them to a digital format and does the necessary processing and compresses data to fit the available bandwidth of a bus to which it is communicating to Host 52 compresses data to meet available bandwidth (col. 3, line 33-col. 4, line 8 and col. 5, line 3-55).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Billerbeck into the system of Ellis as modified by Yamamoto to compressed the digital data to meet the available bandwidth on the network in order to efficiently transmit data across the LAN devices.

Claim 6 is met as previously discussed with respect to claim 2.

8.      Claims 10-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ellis et al (2005/0028208)** in view of **Isono et al (6,216,171)** as applied to claim 7 above, and further in view of **Tidwell et al (2001/0043687)**

As to claims 10-11 and 13, Ellis as modified by Isono, fail to teach to explicitly teach voicemail and its claimed limitations.

However, **Tidwell** teaches a STB or TV-12 for receiving voicemail capabilities

where incoming calls can be routed to the telephone and controlling the outgoing calls

(page 2, [0030-0033], [0036], [0045-0047] and [0055].

Therefore it would have been obvious to one of ordinary skill in the art at the time

of the invention to incorporate the teaching of Tidwell into the system of Ellis as

modified by Isono to provide voicemail and telephone services within the gateway to

enable user of the various LAN devices to communicate directly with each other and via

telephone or voicemail while watching television

### Response to Arguments

9.      Applicant's arguments with respect to claims 1-14 have been considered

but are moot in view of the new ground(s) of rejection. The amendment to the claims

necessitated the new ground(s) of rejection discussed above. This office action is non-

final.

### Conclusion

10.     The prior art made of record and not relied upon is considered pertinent to
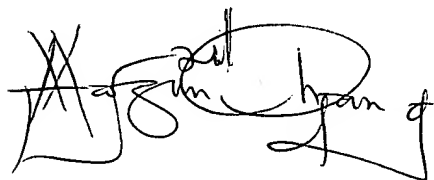
applicant's disclosure.

Gerszberg et al (6,452,923) disclose cable connected WAN interconnectivity

services for corporate telecommuters.

11.     Any inquiry concerning this communication or earlier communications from
the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone
number for the organization where this application or proceeding is assigned is **571-273-8300.**

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
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system, **call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.**

**Annan Q. Shang**